

Events to Know

September

4 Labor Day Holiday.

5 Complementary and Alternative Medicine (CAM) course: "Spiritual and Folk Healing." Noon-1 p.m., MSB 1.006.

7 CAM course: "Ayurveda and Homeopathy." Noon-1 p.m., MSB 1.006.

11 MSRDP Board Meeting. 4 p.m.-6 p.m., MSB 2.103. All members invited.

11 Blood drive to honor victims of Sept. 11. 9 a.m.-3 p.m., Medical School Leather Lounge.

12 CAM course: "Acupuncture: What's the Evidence?" Noon-1 p.m., MSB 1.006.

14 CAM course: "Integrating CAM into Your Medical Practice." Noon-1 p.m., MSB 1.006.

14 Dean's Town Hall Meeting. Noon-1 p.m., MSB 3.001. Lunch available for first 100 attendees. Anonymous questions for Interim Dean Jerry Wolinsky may be submitted via Sheila.R.Donnell@uth.tmc.edu.

UTMost Interest

Dr. Deborah Ann Pearson, professor of psychiatry and behavioral sciences, was selected as a member of the Child Psychopathology and Developmental Disabilities Study Section, Center for Scientific Review for the term beginning July 1, 2006 and ending June 30, 2010. Members are selected on the basis of their demonstrated competence and achievement in their scientific discipline as evidenced by the quality of research accomplishments, publications in scientific journals, and other significant scientific activities, achievements, and honors.

Dr. Arun Gadre, visiting associate professor of otolaryngology – head and neck surgery, was a section editor for the fourth edition of *Head and Neck Surgery – Otolaryngology* published by Lippincott Williams & Wilkins.

Tyson's new role helps advance clinical research agenda

Dr. Jon Tyson has been selected to fill a new role as assistant dean for clinical research, effective Sept. 1, which will complement his current position as director of the Center for Clinical Research and Evidence-Based Medicine.

"Dr. Tyson has been one of our leaders in advancing clinical research at the Medical School, since he first arrived in 1998 to direct the Center for Clinical Research and Evidence-Based Medicine," said Interim Dean **Jerry Wolinsky**. "We are confident this new role will help him make an even greater contribution to clinical research education."

Tyson, holder of the Michelle Bain Distinguished Professorship in Medicine and Public Health, said the new role goes hand in hand with his current duties at the center. "Primarily, I'll be responsible for doing the same things that I'm currently doing to promote the quality of clinical research across all departments and the development of young clinical investigators at UT-Houston," he said.

Established in 1998, the center's purpose is to increase the public's healthy years of life by promoting clinical research of the highest quality and by advancing the application of this research in preventing acute suffering, disability, and premature death.

With funding from the National Institutes of Health, the center initiated educational programs, including a Clinical Research Curriculum and an Intensive Mentorship Program in 1999 and a Master's Degree Program in Clinical Research in 2002.

There have been more than 200 participants in the Clinical Research Curriculum, which promotes clinical research expertise among clinical investigators at the fellow and junior faculty levels. The curriculum consists of a two-year series of basic courses, and Tyson said the courses are designed to meet the needs of busy professionals.



Dr. Jon Tyson

(Cont'd. on back)

Study reports abnormal heart function in severely obese

A new Medical School study is yielding some of the earliest clinical evidence of abnormal heart function in clinically severe obesity.

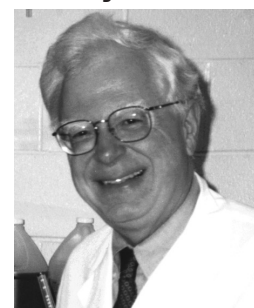
In findings published in the August 2006 edition of the *American Journal of Clinical Nutrition*, principal investigator **Dr. Heinrich Taegtmeier**, professor of cardiology, and **Dr. Joshua Leichman**, clinical fellow, report on early changes in heart function related to the oversupply of fat, with a focus on the heart's ability to pump blood. Results are based on the extensive examination of the hearts of 64 patients.

A build-up of fat inside heart muscle cells weakens the heart muscle and prevents the heart from functioning properly. "Everybody talks about fat and cholesterol building up in the arterial walls, but fat metabolism does not stop in the arterial walls," Taegtmeier said. "It continues inside the heart muscle cells. The heart fails in the midst of plenty, having more fat than it can handle." Specifically, Taegtmeier is referring to free fatty acids, the precursor to triglycerides (the storage forms for fatty acids), in the bloodstream, which maintain higher levels in obese patients.

Taegtmeier says obesity creates a "masking effect" that makes impaired heart pump function difficult to detect. He explains that because obese patients are generally not as physically active as healthy-weight patients, they do not notice that they are short of breath "until the heart is really far gone."

"Obese patients are not likely to run to catch the bus or chase after their three-year-old," Taegtmeier said.

The study began with blood work for all patients as Taegtmeier's team sought to establish baseline insulin sensitivity by measuring patients' glucose, insulin, cholesterol, and free fatty



Dr. Heinrich Taegtmeier

(Cont'd. on back)



Annual blood drive set Sept. 11

The Medical School will host its annual blood drive to honor the memory of the victims of Sept. 11 from 9 a.m.-3 p.m. Monday, Sept. 11 in the Leather Lounge.

Advance signups will be held 11 a.m. until noon Wednesday, Sept. 6 in the Leather Lounge with **Andrea Johnson**, a representative from the Gulf Coast Regional Blood Center.

Appointments are not necessary, and all donors will receive T-shirts. Blood supplies are at critical levels, and your support will be greatly appreciated.

Tyson, cont'd.

"We design the classes to be flexible, feasible, and tailored to the needs of individual investigators," he said, adding that classes meet every Wednesday from 5-6:30 p.m. "In a number of the courses, participants develop an outline for a clinical research project. In our design workshops, the participants then develop them into full proposals."

The Master's Degree Program in Clinical Research trains clinical investigators in designing and conducting patient-oriented research of exemplary quality. It is directed by **Dr. Kathleen Kennedy**, professor of pediatrics, and co-directed by Tyson. The training program can be completed in three to four years and is intended to accommodate the busy lifestyles of clinicians in a focused, flexible, and affordable way.

Similar programs in many institutions require 75 percent protected time. "While we now recommend that participants in the master's program have at least 33 percent protected time, committed participants with as little as 20 percent protected time may complete our full program in three years," Tyson explained.

Tyson said there has been a great response to the master's degree program, which has enrolled 57 participants since 2002 and will graduate 11 participants by the end of the fall.

"To date, 17 career development awards and numerous grants have been received by participants in the master's and mentorship programs," he added.

As the center's director and now assistant dean for clinical research, Tyson will help assure effective use of funds recently committed by UT Health Science Center President **Dr. James Willerson**.

The funds will be used to recruit four senior clinical investigators over the next four years who will devote part of their time to teaching and mentoring young investigators. These senior investigators will be members of different clinical departments, and the junior investigators will benefit from the experience of working with a skilled researcher.

Funds also will support protected time for a part-time research nurse or technician to help master's degree program participants or graduates obtain needed pilot data to develop highly competitive grant proposals and career development awards.

"I will work with Dr. Wolinsky to assure that those funds are well used and to develop further programs for training clinical investigators at UT-Houston," Tyson said.

Tyson received his medical degree from Tulane University School of Medicine in New Orleans and earned a master's degree in public health from the UT School of Public Health. As a neonatologist, he has devoted his clinical research career to improving the outcome of high-risk babies, particularly those who are very premature.

For the past 20 years, he has been a principal investigator for the Neonatal Research Network funded by the National Institute of Child Health and Human Development. The UT Medical School is one of only 16 centers in the country selected for this elite network, which designs and conducts clinical trials that test the most promising ways to improve the outcome of high-risk newborn infants.

-C. Webb

Billing Compliance Coordination set up to help physicians

The Department of Billing Compliance Coordination (BCC) has been established to assist Medical School physicians with the ever-changing mandates related to billing integrity. The BCC department is located at The University of Texas Health Science Center Professional Building building, Suite 1223A.

Director **Maryann Cox** is joined by **Caroline Wolbrecht** and **Marsha Hall-Harris** to assist physicians with up-to-date information related to coding and compliance mandates at both the state and federal level. The BCC has begun their program in earnest by initiating a coding hotline and coding HEAT ticket system to answer questions related to coding. Additionally, certified coding specialists will be available to assist physicians on a day-to-day basis with coding and compliance issues.

Physicians are encouraged to call 832.325.7675 for more information or to schedule time with the department's certified coding specialists who can answer their most pressing questions and ease their coding stress.

Abnormal heart, cont'd.

acid levels after fasting. They also measured two types of proteins, known as adipokines, specifically derived from fat: leptin (responsible for regulating energy or food intake and the partitioning of fat into fat cells or organs like the heart or liver) and adiponectin (associated with insulin sensitivity).

"Interestingly, when people become obese, their adiponectin levels drop, which is a little counter-intuitive because it's made by the fat cell, so you'd think if you have more or bigger fat cells, you'd make more adiponectin," said Leichman, the study's first author. "Adiponectin has also been shown to correlate inversely with insulin sensitivity, so that if you have higher normal adiponectin levels, you probably have normal insulin sensitivity, meaning insulin signals the cell to take up glucose and to utilize it appropriately. Whereas in the obese population, if you have a low adiponectin level, you may have insulin resistance, meaning that the cell doesn't recognize or respond to insulin and glucose runs through the bloodstream, becoming potentially toxic to the body." The study found very high levels of leptin in the obese patients.

In addition to blood chemistries, patients also received echocardiograms to measure systolic heart function (the way the muscle squeezes) and diastolic function (the way the muscle relaxes right before pumping blood). "Tissue Doppler imaging, a relatively new mode of echocardiography, was used to measure how the myocardium moves rather than how the blood flows through a valve," Leichman said.

In the study, Taegtmeier and Leichman report finding sub-clinical dysfunction in about 40 percent of their patients. That is, in diastole, there is impairment in heart relaxation. "This negatively correlates with the amount of free fatty acids in the bloodstream," Leichman said.

"At baseline, we observed that the higher free fatty acid level in a patient, the more likely he or she would have diastolic impairment, whereas the lower the level, the more likely he or she would have normal diastolic function," Leichman explained. Furthermore, investigators believe it is unlikely that age or co-morbid states, such as diabetes, hypertension, or medications, contributed to the findings of the relationship between free fatty acids and diastolic function.

-D. Mendel

To send a news tip or event for **Scoop**,
e-mail scoop@uth.tmc.edu.